



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,464	02/22/2002	Paul N. Dunlap	L00-079A	1062
26683	7590	11/17/2004		
THE GATES CORPORATION IP LAW DEPT. 10-A3 1551 WEWATTA STREET DENVER, CO 80202			EXAMINER JACKSON, MONIQUE R	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,464

Applicant(s)

DUNLAP, PAUL N.

Examiner

Monique R Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 and 29-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/02,9/02&4/03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The amendment filed 9/1/04 has been entered. New claims 25-41 have been added. Claims 1-41 are pending in the application. Claims 1-16 have been previously withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Newly submitted claims 29-37 and 38-41 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons: claims 29-37 are directed to a laminate that is distinct from the originally claimed laminate given that the structural members may be plastics and not metal and therefore is classified under a different subclass; claims 38-41 are directed to a torsional vibration damper which is related to the instant invention as mutually exclusive species in an intermediate-final product relationship wherein the intermediate product is deemed to be useful as a hose and is classified under a different class and subclass.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 29-41 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

5. Claims 17-24 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Drake et al (USPN 5,300,569) for the reasons recited previously and restated below.

Drake et al teach an uncured adhesive elastomeric composition useful for improving the bonding of elastomers to other elastomers or to metals wherein the elastomeric composition comprises an unsaturated polymeric dicarboxylic acid or derivative adduct to improve adhesion and an elastomer wherein the elastomer may be a sulfur-curable elastomer such as styrene butadiene rubber, polybutadiene rubber, acrylonitrile butadiene rubber, polychloroprene rubber, or it may be an elastomer that is cured with peroxide catalyst or other such free radical producing catalysts such as ethylene propylene rubber, ethylene propylene diene rubber, natural rubber and fluorosilicone rubber (Col. 6, line 31-Col. 7, line 22.) The composition further comprises at least one curative such as sulfur and sulfur donors, peroxides, and cure rate accelerators such as TBBS or TMTD, and may further include additives such as cure rate enhancers or inhibitors (Col. 4, line 57-Col. 5, line 65.) Drake et al teach that extra amounts of curing agent including sulfur, thiazoles, thiurams, sulfonamides, dithiocarbamates and xanthates can improve the tensile strength and other physical properties of the cured adhesive elastomers (Col. 11, line 48-Col. 12, line 5.) Drake et al also teach that a film of the elastomeric composition can be utilized to bond metal substrates to metal substrates and subjected to a vulcanization step and that the elastomer composition is useful in various applications such as for bonding steel to tire cord, in hydraulic hoses, for bonding of rubber to metal inserts for seals and for the metal to elastomer interface in shock mounts and other elaborately engineered metal to elastomer items (Col. 4, lines 47-66.)

6. Claims 17-19 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ravagnani et al (USPN 4,239,663) for the reasons recited previously and restated below.

Ravagnani et al teach a method of providing improved rubber-to-metal adhesion and the product produced wherein p-aminobenzoic acid or cobalt salt of p-aminobenzoic acid is mixed into a rubber composition, the composition is brought into contiguous relationship with a metal member in an unvulcanized product and then the product is vulcanized to yield a cured end product (Abstract.) The rubber composition comprises a vulcanizable rubber such as natural rubber, synthetic rubbers, polyisoprene, polybutadiene, copolymers of butadiene and styrene, and blends thereof, and further comprises a sulfur/oil blend for curing, cure accelerators, reinforcing carbon black, and other compounding ingredients customarily employed in the rubber compounding art such as pigments, accelerators, vulcanizing agents, etc. (Col. 6, line 52-Col.7, line 40.) Ravagnani et al teach that the rubber composition may be utilized to adhere several metal wires embedded in the composition such as in producing metal wire reinforced or braided hose, or utilized to produce rubber printing rolls, power belts and wherever it is desired to secure rubber to plated or unplated metal to provide a flexible and strong bond between the same (Col. 5, line 65-Col.6, line 22; Col. 7, line 41-51; Col. 8, lines 4-18; Examples.)

7. Claims 17-20 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagel (USPN 5,776,294) for the reasons recited previously and restated below.

Nagel teaches peroxide-cured elastomers comprising metal salts of unsaturated carboxylic acids to provide improved adhesion to metals and other polar surfaces wherein the elastomer composition comprises a curable elastomer such as natural rubber, polybutadiene rubber, ethylene propylene rubber, styrene butadiene rubber, silicone elastomers, vinyl acetate

ethylene copolymers, and chlorinated polyethylene rubber; a vulcanizing agent that decomposes to produce free radicals; the metal salt of an acrylic or methacrylic acid crosslinking coagent; a vulcanization inhibitor; and other conventional additives; wherein the elastomer composition may be placed between two polar surfaces, such as two surfaces of metal like cold rolled steel, stainless steel, brass, zinc or aluminum, to bond the surface together under pressure and heat (Col. 3-Col. 8.) Nagel also teaches that products produced from the elastomer composition include belts and rubber rolls (Col. 7, line 57-Col. 8, line 24.)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake et al. The teachings of Drake et al are discussed above. Drake et al teach that a film (*i.e. pre-formed*) of the elastomeric composition can be utilized to bond metal substrates to metal substrates and subjected to a vulcanization step and that the elastomer composition is useful in various applications such as for bonding steel to tire cord, in hydraulic hoses, for bonding of rubber to metal inserts for seals and for the metal to elastomer interface in shock mounts and other elaborately engineered metal to elastomer items (Col. 4, lines 47-66.) Though Drake et al do not specifically teach the use of the elastomeric film in producing a torsional vibration damper as instantly claimed, one having ordinary skill in the art at the time of the invention would have been motivated to utilize the elastomeric film/composition taught by Drake et al in any rubber-

to-metal application wherein a conventional torsional vibration damper comprises a rubber/metal laminate.

Response to Arguments

10. Applicant's arguments filed 9/1/04 have been fully considered but they are not persuasive. The Applicant's main argument is that the prior art references teach "vulcanization bonding" and hence do not anticipate the instant invention which require the rubber member to be "formed" as described throughout the specification. The Applicant refers the Examiner to particular portion of the specification which allegedly provide the meaning of the term "formed" wherein the Applicant argues that the term "formed" as recited in the claims means that "the rubber has been vulcanized in a shape-forming mold sufficient to substantially cure the rubber and that the formed rubber can be handled and manipulated without affecting its dimensional integrity." However, the Examiner first notes that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the Examiner notes that these limitations appear to be process limitations wherein the rejected claims are directed to product claims and the product claims as recited do not appear to provide any structural or material difference from the final products taught by the prior art.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson
Primary Examiner
Technology Center 1700
November 15, 2004